

DOCUMENT RESUME

ED 140 031

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CE 011 314

TITLE A Comparison of Four Experience-Based Career Education Programs: What They Offer. How They Differ.

INSTITUTION National Inst. of Education (DHEW), Washington, D.C. Education and Work Group.

PUB DATE 76

NOTE 55p.

EDRS PRICE MF-\$0.83 HC-\$3.50 Plus Postage.

DESCRIPTORS Adoption (Ideas); *Career Education; Career Exploration; Community Involvement; Curriculum Development; *Educational Alternatives; Educational Programs; Educational Strategies; Fused Curriculum; Models; Occupational Guidance; *Program Administration; Program Content; *Program Descriptions; Program Planning; *School Community Cooperation; Secondary Education; Student Centered Curriculum; *Student Experience; Work Experience Programs

IDENTIFIERS Appalachia Educational Laboratory; *Experience Based Career Education; Far West Laboratory for Educational R and D; Northwest Regional Educational Laboratory; Research for Better Schools Incorporated

ABSTRACT

This publication is intended to provide educators and interested community agencies with basic information to help determine which of the four Experience-Based Career Education (EBCE) programs would be most appropriate for their school and community. Four regional educational laboratories selected by the National Institute of Education to develop the EBCE concept into an operational alternative for high school students are compared. The four models are the Appalachia Educational Laboratory (West Virginia), Far West Laboratory (California), Northwest Regional Educational Laboratory (Oregon), and Research for Better Schools (Pennsylvania). (Although the four laboratories applied different strategies in the development of their own versions of EBCE, each of the four programs achieves three common goals: (1) Each program is student-centered and provides personalized learning experiences to all students, (2) the focus of student learning activities is in the community at cooperating experience sites, and (3) each program has developed procedures and materials for integrating academic learning with career experiences.) The models are described in terms of 23 program elements that have been identified to provide a context for comparison. These program elements have been grouped into the major categories of curriculum, employer/community utilization, guidance, and management. Sources for additional information on the four programs are appended. (TA)

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A COMPARISON OF
FOUR EXPERIENCE-BASED CAREER EDUCATION PROGRAMS

- What They Offer
- How They Differ

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National Institute of Education
Education and Work Program
U.S. Department of Health, Education and Welfare
1976

ACKNOWLEDGMENTS

The material contained in this document is based on the original development work of four regional educational laboratories under contract with the National Institute of Education. The efforts of the Experience-Based Career Education staffs of the following laboratories are greatly appreciated:

- Appalachia Educational Laboratory, Inc., Charleston, West Virginia, Dr. Harold L. Henderson, Director, EBCE Program
- Far West Laboratory, Inc., San Francisco, California, Dr. Robert Peterson, Director, EBCE Program
- Northwest Regional Educational Laboratory, Inc., Portland, Oregon, Dr. Rex Hagans, Director, Career Education Program
- Research for Better Schools, Inc., Philadelphia, Pennsylvania, Dr. Michaelita Quinn, Director, EBCE Program

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WHAT IS EBCE?

Experience-Based Career Education (EBCE) is a new approach to secondary education. It has been developed by the National Institute of Education and four regional educational laboratories to help bridge the gap between the classroom and the community.

EBCE combines learning activities outside and within the school into a balanced, comprehensive, individualized program for high school students. The community is analyzed for its potential as a learning resource. Student experiences in the community are then carefully planned, supervised and evaluated.

Students learn subject matter normally studied in the classroom, but they learn through the practical application of academic disciplines in the workaday world. They explore important new dimensions about themselves and potential careers, and they learn how to make informed career decisions.

INTRODUCTION

Development of EBCE

The concept of Experience-Based Career Education (EBCE) was initiated in 1971 by the U.S. Office of Education. After a series of feasibility studies, four regional educational laboratories were selected by the National Institute of Education to develop the EBCE concept into an operational alternative for high school students. The four EBCE programs described in this document have undergone extensive evaluation and the results clearly indicate that each program provides an effective alternative for senior high school students. Evaluation data for the school years 1972-73, 1973-74, 1974-75 and 1975-76 are available from the National Institute of Education and from the individual laboratories.

Similarities in the Four Models

Although the four laboratories applied different strategies in the development of their own versions of EBCE, each of the four programs achieves three common and essential goals. First, each program is student-centered and provides personalized learning experiences to all students. Second, the focus of student learning activities is in the community at cooperating experience sites. Finally, each of the four EBCE programs has developed procedures and materials for integrating academic learning with career experiences.

Differences in the Models and How to Identify Them

The overall intent of this publication is to provide educators and interested community agencies with basic information to help determine which of the four EBCE programs would be most appropriate for their school and community. Immediately following this introduction are brief profiles of the four models. The models are then described in terms of 23 program elements that have been identified to provide a context for comparison. These program elements are listed in the preceding Table of Contents. They have been grouped into the major categories of curriculum, employer/community utilization, guidance and management.

Reviewers can first scan the program element descriptions (upper left of each even-numbered page) to identify the areas of most concern and then compare the four models. The four versions of each element are presented side by side on facing pages for easy reference.

Each of the four laboratories offers materials, technical assistance and staff training to help others plan and implement their own EBCE programs. See page 50 for information on these services.

Profiles of the Four Models

The following brief descriptions display highlights of the various elements in one place to help reviewers visualize the total program in each of the four models before examining individual elements.

Appalachia Educational Laboratory

In the pilot program of the Appalachia Educational Laboratory, Charleston, West Virginia, the EBCE curriculum is designed around the courses and credits required by a home high school but is a total alternative to traditional course work. Five major areas (Career Education, English/Communications, Mathematics, Natural Science and Social Science) form the basis of a concept-centered curriculum, and academic course work is integrated with career exploration experiences in the community.

Using two main curriculum documents--the Student Program Guide and the Student Career Guide--program staff work with each student individually to build an integrated career exploration plan for the student and an academic program based on stated learning objectives. Students must also complete a "Career Planning and Decision Making" course, which promotes mastery of basic career decision-making skills.

Instead of attending classes, AEL/EBCE students spend 70-80 percent of their time at community sites of their choice, completing their personalized academic and career programs. The learning potential of each community site is analyzed and recorded in Experience Site Learning Guides. Students then use the learning guides and diagnostic testing keyed to the U.S. Department of Labor's 114 Worker Trait Classification system to access experience sites of their choice.

Far West Laboratory

Developed as a comprehensive alternative school program in urban Oakland, California, the EBCE model of the Far West Laboratory for Educational Research and Development is being implemented in a variety of communities and in differing configurations: for a cross section of students or a special target group, as a program within school or as a separate school and as a full-time or part-time option for students.

Students plan and carry out their education through individual and small group projects designed according to program guidelines and approved by staff, and the resource persons with whom the students learn. Projects blend Career Development with Basic Skills, Life Skills and academic learning, enabling students to earn course credits in standard areas through community-based research, experience and related reading and discussion. Depending on their individual needs and interests, students spend from 20 to 80 percent of their time in the community in one-to-one and small group interactions with volunteer resource persons.

To support and build upon students' individualized learning, FWL/EBCE uses a variety of group experiences (advisory groups, project seminars, workshops). Students may also enroll in regular high school or community college courses to meet their individual needs.

Northwest Regional Educational Laboratory

Northwest Regional Educational Laboratory's pilot site in Tigard, Oregon, offers a full-time, comprehensive, interdisciplinary program with three curriculum areas--Basic Skills (reading, math, communications), Life Skills (creative development, critical thinking, personal/social development, science, functional citizenship, competencies) and Career Development (identifying career interests, understanding the world of work, employability skills, career knowledge). Learning strategies for delivering these outcomes include career explorations, projects, learning and skill building levels, competency certification, student journals and world of work seminars.

Each student's learning plan is developed by the student and staff through a cycle of assessment, negotiation, performance, evaluation and integration of experiences.

Students spend about 50 percent of their program time at learning sites, working directly with community instructors--individuals who have volunteered to take part in the program and receive some training from program staff for this role. The program uses a detailed task analysis procedure to identify the full learning potential of each employer/community site and translate that potential into learning objectives. The objectives then become the basis for individualized projects which students complete in the community.

Research for Better Schools

The EBCE model of Research for Better Schools, in Philadelphia, Pennsylvania, is designed to operate on and benefit from the regular school curriculum. The EBCE experience is delivered through three program components--Career Development (consisting of both exploration and specialization), Career Guidance and an Academic Resource Center. The program introduces these components into the secondary school curriculum, and half of the students' courses and/or scheduling is based on the parent/school requirements and schedules.

Students spend approximately 20 percent of their school week in the community, where they expand their career development through explorations (a series of group mini-courses held at community resource sites) and specialization (a program of independent study projects).

A basic skills component delivered through the Academic Resource Center allows for individualization based on student assessment, and a program of group guidance instruction helps students clarify career possibilities for themselves.

Curriculum Design

Each EBCE model has developed its own curriculum design to accomplish the common objectives of involving people and facilities in the community as the principal resources for student learning and combining community learning activities into a balanced, comprehensive, individualized program for high school students.

Appalachia Educational Laboratory

AEL/EBCE curriculum specialists developed a concept-centered curriculum based around five major areas (Career Education, English/Communications, Mathematics, Natural Science and Social Science), which are subdivided into a hierarchy of 18 major concepts, 85 subconcepts and over 500 general objectives. These general objectives form the base for an almost infinite number of specific objectives for individualized student learning activities.

The academic concepts, subconcepts and objectives are organized into 28 courses from which students build their EBCE programs. Some of the program courses are traditional (e.g., algebra, chemistry, standard English) and others are nontraditional (e.g., American institutions, family relationships, modern technology).

Based on their academic transcript requirements and in consultation with their learning coordinators, AEL/EBCE students select the courses they need and/or want and then select a limited number of subconcepts and general objectives, which constitute the organizing structure of their individualized academic programs. As well as selecting academic courses, students also begin focusing on the world of work as they undertake the process of career planning and decision making.

Far West Laboratory

FWL/EBCE focuses on three core areas: Career Development--including career awareness and self-development; Basic Skills--specifically reading, writing, oral communications and computational skills; and Life Skills--interpersonal, inquiry, problem solving and decision making. Resource sites are developed and analyzed for learning potential in these areas as well as for conceptual and technical content.

Drawing on the core curriculum goals and the learning potential offered by resources, staff help students work out individualized goals, objectives and activities organized in the form of a project plan. Project planning emphasizes an inquiry process, starting with the student's own questions.

Project Planning Packages (in Life Science, Physical Science, Social Science, Commerce and Communications & Media) provide students and staff with ideas and guidelines for developing projects that blend Career Development, Life Skills and Basic Skills and are acceptable for academic credit equivalent to a semester's course work.

Northwest Regional Educational Laboratory

The NWREL/EBCE curriculum is divided into three content areas--Life Skills, Basic Skills and Career Development. Each content area has specific outcome goals for students. Staff work closely with students to develop individualized projects derived from potential learning activities at community sites the students select. Each project has specific objectives integrating the goals of the three curriculum areas with the individual student's needs, interests and abilities.

The five Life Skills categories of creative development, critical thinking, personal/social development, science and functional citizenship emphasize lifelong learning, personal growth and the relationship of individuals to broader community, national and world concerns. The Life Skills content area also includes a set of "survival skills" called competencies, identified by the local community as necessary for daily living. These include knowledge of checking accounts, insurance, budgeting, auto maintenance, etc. EBCE students must demonstrate competence in these areas as part of program requirements.

Basic Skills concentrates on the reading, mathematics, writing, listening and speaking skills needed to perform tasks and functions in the program and in adulthood.

Career Development focuses on identifying career interests, understanding the world of work, general employability skills and career knowledge.

Research for Better Schools

Each student's curriculum in RBS/EBCE involves Career Development (exploration and specialization), Career Guidance and the Academic Resource Center, in addition to regular high school course work.

Career exploration is a series of mini-courses designed around group and individual activities that are planned and conducted at community sites. Each mini-course, planned around a cluster of career areas, is offered either as an elective or as a substitute for required social studies courses. Specialization provides students with in-depth, individual project opportunities.

Projects may be the result of assignments in academic subject areas, special student interests or career exploration followup. In all cases, projects mix career and academic learning for required or elective school credit and involve student input on project design and hands-on student experience in the community. Career Guidance uses both structured and informal group guidance activities to develop students' decision-making and problem-solving skills with respect to career planning. Initial sessions (usually one hour per week) are designed around a structured Career Clarification curriculum. The Academic Resource Center provides students with individually prescribed instruction in English and mathematics, complementing and preparing the student for EBCE activities in career exploration and specialization. Remediation of special student needs is also provided.

Program Completion Requirements

Each program specifies minimum essential skills and activities that students must meet in order to complete the EBCE program satisfactorily and receive a high school diploma.

Appalachia Educational Laboratory

Although AEL/EBCE students may be housed in a learning center physically separate from the high school, the students graduate from their home high schools. Accordingly, the minimum requirements that AEL imposes on students participating in EBCE through their senior year is satisfactory completion of the course, credit and grade requirements of the local school system. Major emphasis during student orientation is on identifying and verifying remaining course and credit requirements, and a major evaluation and curriculum planning focus throughout the student's program is on acceptable completion of those requirements. Additionally, all students must participate in an EBCE "Career Planning and Decision Making" course during each semester. Supplemental requirements for graduation may vary depending on student and parental requests and/or needs--from basic reading and mathematics proficiency through special courses for students seeking certain types of postsecondary education or training.

Far West Laboratory

In addition to meeting local district graduation requirements, each FWL/EBCE student must satisfy minimum competency requirements in reading, writing, oral communications, career awareness and career decision making. Competence is assessed by observing performance in real situations rather than by standardized testing.

Standards have also been established for student programs and projects, which districts may adapt to meet local needs and constraints. Program criteria include 25 to 30 hours of program activity per week, including 50 percent of time in project activities and 30 percent at resource sites, keeping appointments and commitments and making satisfactory progress toward completion of graduation requirements.

Each student project must include exploration or investigation level activities with at least one resource person or organization, related reading and at least one tangible product. Each project must also include Career Development, Basic Skills and Life Skills activities and acquisition and use of concepts and skills of the kind identified in the relevant Project Planning Package.

Students are not required to complete a standard number of projects; rather, the number, scope and depth of student projects may vary widely depending on student interests, needs and abilities.

Northwest Regional Educational Laboratory

Research for Better Schools

NWREL/EBCE has specific program completion requirements that have been accepted by state and local education agencies as different from but equal to traditional requirements. Students completing the program receive standard diplomas from their parent high school. Program requirements include the following:

Students remain on the rolls of the high school. They are required to earn the same number of credits all students must earn, but their credits must reflect career development, career guidance and basic skill development as well as prescribed and elective courses.

1. Each year, students must complete ten projects, two in each Life Skills area. Each project includes Basic Skills activities.
2. A set of 13 skills or competencies must be completed by all students, whether they enter the program as juniors or seniors. (The competencies include such "survival skills" as budgeting, auto upkeep and maintaining a checking account.)
3. Students must spend a minimum of 15 hours per week at employer/community sites and complete a minimum of five career explorations and one learning log per year.

Individual content requirements are negotiated with each student to relate curriculum goals to the information and skills the student needs to pursue personal and career goals on a lifetime basis.

Mode of Learning

Each EBCE program was developed around specific student learning strategies, and the strategies vary from program to program.

Appalachia Educational Laboratory

AEL/EBCE materials, curriculum and instructional and evaluation strategies revolve around the conviction that the process of learning must be as carefully and completely taught as the content of learning. The major vehicle for documenting and guiding student learning is the Activity Sheet, a single page learning model designed to develop critical thinking and inquiry skills in the student regardless of the specific content of the project. Each short-term project, whether academic or career oriented, is planned to help the student gain skill in five clearly specified levels of inquiry--defining the problem, gathering data, organizing/analyzing data, generalizing or making inferences and communicating the results. Each completed Activity Sheet is evaluated in four different ways, one of which is student progress in using these inquiry or critical thinking skills. AEL/EBCE students thus not only master specific subject information but also master and apply the basic skills needed to continue learning and thinking rationally and effectively throughout life.

Far West Laboratory

The individualized student project planned by the student and approved by staff is the central means of organizing student learning and awarding credit for student work. Students learn by planning, questioning, doing and evaluating their own experiences and performance. Students learn how to learn through an inquiry process--identifying significant questions and appropriate resources, working with people in the field supplemented by related reading, analyzing what they do and learn and synthesizing the results in written or other products and through individual and group discussions with staff. While students may pool their interests and skills in a small group project, the basic process is the same.

Students' experience-based learning is supported and expanded through advisory group sessions with their learning coordinator and through project seminars in which students working on related projects (e.g., in Life Science) share their individual research and thus broaden their knowledge of the field.

Other strategies--independent study using programmed materials, tutorials, small group workshops or enrollment in regular high school or community college courses--are among the options available to students and staff in building comprehensive learning programs to meet individual student needs and interests. Whenever possible, these supplementary activities are made an integral part of the students' projects.

Northwest Regional Educational Laboratory

NWREL/EBCE bases its instructional strategies around one central theme: that the lifetime payoff of formal education should be the ability to keep on learning. Students discover that experiences in the community offer significant learning opportunities which can be integrated with the essential knowledge and skills society expects its educational systems to deliver.

Projects are the primary vehicle for planning and monitoring individual student learning in the community. Students gain practice in basic skills and critical thinking as they complete project activities in specific curriculum content areas. Through the process of career exploration, students gain job investigation and assessment skills. Learning levels give students "hands-on" practice in the skills, knowledge and attitudes required for specific jobs. They also provide the context within which the individual projects are developed.

Through competency certification, students demonstrate their proficiency in stated "survival skills" needed for adult daily living. Journal writing helps students develop communication skills and integrate their experiences with personal needs and goals. Seminars give students opportunities to meet as a group and discuss world of work issues with experts from the community.

Research for Better Schools

The RBS model utilizes three distinct modes of learning--the classroom, individual and group sessions and activities and experiences in the community and/or working on projects in the field. A major objective of these modes of learning is to have the school and the community work together to implement a career education program.

Students learn through the three program components of Career Development, Career Guidance and the Academic Resource Center. Career Development, which includes career exploration and specialization, provides students with the means to acquire knowledge and skills that will help them understand the economic sector through both a series of structured experiences at resource sites and individual projects. Career Guidance, a small group activity, is designed to improve a student's understanding of the work environment, personal strengths and weaknesses and the importance of career planning. The Academic Resource Center provides for basic skill development in English and math through individualized materials prescribed on the basis of diagnostic testing. These components are all complements of the regular school curriculum.

Student Learning Plan Development

EBCE requires an orderly process for assessing and documenting each student's academic and career program of study. Student learning plans are developed to derive an acceptable set of objectives that will shape each student's personalized experience in EBCE.

Appalachia Educational Laboratory

A Student Program Guide helps AEL/EBCE students (a) identify their career interests and aptitudes using self-assessment exercises and tests; (b) identify their academic needs and interests through transcripts and basic skills inventories; and (c) select specific EBCE courses, job titles, experience sites and academic themes based on these academic and career assessments. Several manuals and guides cross reference general career and academic choices with experience sites, texts, exercises and community resource persons so that each student can create the precise blend of activities, materials and locations which are most appropriate.

Personalized counseling, discussion and negotiation sessions between a student and learning coordinator (staff person filling the role of teacher/tutor/counselor) then lead to creation of specific Activity Sheets--short-term learning projects which identify in clear, measurable terms precisely what learning will occur, as well as where, when and how. Used frequently to refine student activities in response to learning outcomes, all of these materials and strategies provide both comprehensive documentation and opportunities for flexible, clearly specified, manageable, yet fully individualized student learning plans and activities.

Far West Laboratory

FWL has developed procedures to facilitate the planning and implementation of learning programs based on each student's interests and needs and aimed at growth in Basic Skills, Career Development and Life Skills.

After entry assessment has been completed during the student's orientation to the program, the student and learning coordinator formulate a long-term plan, then focus on how the student will accomplish the goals laid out in the plan.

With help from staff the student selects learning strategies, begins visiting resources, may enroll in classes or "tutorials" at the learning center and, most significantly, begins project planning. Project Planning Packages provide students and staff with a convenient framework for designing projects that integrate academic and career learning. Each package unites a study area such as social science with associated careers. It includes goals, relevant concepts, issues and topics, sample projects, a list of available resources and suggested readings. Using the project format, students specify questions they want to answer, goals they intend to achieve, resources and activities needed to carry them out and how they intend to demonstrate the achievement of their goals. Student progress, needs and interests are continually reassessed and the student is involved in replanning as necessary.

Northwest Regional Educational Laboratory

In the NWREL model, students' individualized learning plans are based on assessed student needs, interests and abilities. Each learning plan is a well-analyzed, sequenced set of activities that moves the student toward clearly defined learning objectives related to the stated goals of the curriculum.

Learning plans are negotiated between staff and students through a continuing cycle of assessment, prescription, evaluation and integration of experiences. The cycle begins with initial assessment of student needs and interests. Each student then negotiates learning goals with the staff and is helped to design a plan that prescribes learning strategies to meet personal and program goals. As student work in the program progresses, each completed activity is evaluated by student, staff and appropriate community resource people; this evaluation yields the assessment information on which successive learning activities are based.

Student progress in the program is carefully monitored and recorded. Students develop their own timelines for completing activities, then meet regularly with staff to report on their progress and/or renegotiate timelines as needed. In addition, the program has a comprehensive recordkeeping system to keep track of each student's performance and personal growth and verify completion of program requirements.

Research for Better Schools

School staff, functioning as counselors or coordinators, help students plan their EBCE program. Students choose the career clusters they wish to explore by going through the Career Exploration Catalog and making a first, second and third choice. Over the course of a year, students usually explore three clusters (spending an average of 12 weeks on each). In this way students are usually able to explore all three of their choices during the year.

Students interested in career specialization--more in-depth activity at resource sites--must first negotiate with a coordinator to determine what they are prepared to do, then find the resource site to carry out their proposed activity. Students have the primary responsibility for securing a specialization, with some help from the school coordinator.

Students participating in basic skills activities are tested by school staff and then have diagnostic, prescriptive assessments written to form a program plan in either math or English.

Career Planning and Decision Making

The career component of the EBCE program specifies procedures and processes by which students learn how to identify, evaluate and select career areas related to their interests.

Appalachia Educational Laboratory

AEL's program emphasizes the interrelationships among three aspects of career planning and decision making: self-knowledge (aptitudes, interests, temperaments, skills), knowledge of specific careers/jobs and generalized world of work information. Students take several career-related self-assessment instruments. The resulting information is entered on a special matrix contained in the Student Program Guide. The matrix cross references these assessments to the U.S. Department of Labor's 114 Worker Trait Group classifications and leads to selection of several types of careers for initial investigation. The resulting placements, in conjunction with use of a Student Career Guide (a self-directed search instrument) and specific Activity Sheets, involve the student in simultaneously gaining information about (a) a specific job, (b) the job environment, (c) aspects of the world of work and (d) the degree to which the student's initial assessment of personal career aptitudes and interests actually matches the real world experiences the student is having. The cycle of assessment, placement, information collection and reassessment occurs at short intervals throughout the year.

Far West Laboratory

Because of the integrated nature of the three curriculum components (Basic Skills, Life Skills, Career Development) in all student learning activities, career planning and decision making are a recurring focus of student work. During their orientation to the program, students are introduced to a process of career planning and decision making that starts with learning about their own interests, strengths, weaknesses, likes, dislikes and values and recognizing that these may change with further education and experience.

Students are then helped to plan activities and gain experiences in EBCE to test their knowledge of themselves as well as to learn more about careers. They learn to analyze careers not just in terms of duties, requirements and rewards, but in terms of the effect on one's lifestyle and congruence with one's values. In individual and group sessions students are led to evaluate their experiences with resources in terms of what they have learned about themselves, to identify what they like and dislike about the career they have encountered, to continually reconsider their interests and personal goals and to seek additional information and experience to aid their decision making.

While firsthand exploration and testing of expressed interests and goals are emphasized, students are encouraged to use other sources of information (e.g., interest and aptitude inventories and published occupational information) to identify latent interests or skills and select career areas to explore.

Northwest Regional Educational Laboratory

Career planning and decision-making skills are fostered within all NWREL/EBCE student learning activities, including career interest assessment, student journals, world of work seminars, career explorations, learning level experiences and project activities. In addition, all adults involved in the program participate in ongoing career counseling to help students improve their information-gathering and problem-solving skills and add to their store of career information.

Career exploration, particularly, is an important program strategy for helping students gain career decision-making skills. The exploration process and accompanying Career Exploration Package guide students through three to five-day investigations of occupations in the community and help students practice assessment techniques they can use in career planning throughout their lives.

The individualized, problem-centered projects that students complete at community sites encourage students to manage their own learning and perceive the relationships among personal goals, career options and specific knowledge and skills. Through projects, students define and pursue immediate learning goals and examine and refine broader career/life aspirations.

Research for Better Schools

The RBS model provides direct and indirect instruction in career planning and decision making. The career clarification program used in the Career Guidance curriculum component is an instructional program designed to develop student understanding of techniques and information required for career planning and decision making and to provide practical exercises relevant to student experiences in the program. Through exploration and specialization, the Career Development component provides students with information and experiences in a variety of career areas which are the basis for activities in group guidance, course selection and future preparation.

Use of Academic Course Work

This area deals with the extent to which academic course work (i.e., classroom instruction) is integrated with career exploration and decision making in each of the four EBCE models.

Appalachia Educational Laboratory

Although the AEL/EBCE program has been deliberately designed to "stand alone," the twelve sites which have field tested the AEL/EBCE program have demonstrated that regular academic classes can easily be incorporated into students' programs. In fact, when the program is located in the home high school (rather than in a separate facility) EBCE students enjoy the "best of both worlds" as they are able to supplement their EBCE experiences with courses and events such as foreign languages, band, football, etc. Also, EBCE students always have the option of enrolling in local community/career colleges, vocational centers or other types of learning centers.

Far West Laboratory

In general the FWL/EBCE model replaces classroom instruction in academic areas with a combination of individualized research projects and weekly seminars, during which all students working on projects in a given field broaden their knowledge of the subject by sharing their research with one another and discussing concepts, issues, methods and recent developments in the field. Through experience-based projects and seminar discussions, academic learning and career exploration are inseparable parts of the same experience.

EBCE students may also enroll in regular high school or community college courses or pursue academic knowledge and skills through independent study, tutorials or workshops offered through the EBCE program. To the extent these supplementary activities are individualized and controlled by the EBCE staff, they are related to and build on students' field experiences. Whenever appropriate, students enrolled in courses outside of EBCE are encouraged to develop a related project to learn practical applications of the concepts or skills they are learning in class.

Northwest Regional Educational Laboratory

In NWREL/EBCE, academic content is delivered primarily through actual community experiences, and student projects are the principal program strategy for delivering that content. Project activities are addressed specifically to the five Life Skill areas and Basic Skills, as well as Career Development.

In addition, however, students can include regular high school classes in their learning plans if these are appropriate to the individual student's needs and goals. Similarly, EBCE students can enroll in selected classes at community colleges in the area. Educational opportunities at the high school and community colleges are looked on as another kind of community resource to consider in helping students achieve learning, career and life goals.

Research for Better Schools

The RBS model requires student access to regular school classes for all subjects other than English and math, basic skills development and career exploration and specialization activities.

Group Experiences

Various kinds of small group learning activities have been developed within EBCE programs to provide group interaction in a program that is primarily individualized and personalized.

Appalachia Educational Laboratory

Small group activities within AEL/EBCE are designed to provide and/or supplement student growth and learning in several ways:

1. Academic groups enrich learning in ways such as sharing common problems and interests and participating in cooperative small group academic projects.
2. In career groups students share information and insights about their site placements and learning experiences; obtain information about training, job seeking, small businesses, etc.; or practice assessing and applying individual career aptitudes, skills, etc.
3. Guidance/counseling groups provide opportunities for students to develop and promote self-awareness, self-confidence, problem solving and values clarification; bridge the gap between the familiar group approach to education (classrooms) and the new one-to-one relationships (EBCE); and build their skills in human relations and communications.

Such group activities are provided both formally and informally for students on an ongoing basis.

Far West Laboratory

FWL/EBCE incorporates a variety of group experiences to expand learning and peer group interactions:

1. Advisory groups, comprised of those students assigned to a particular learning coordinator, have planned activities to help students become better project planners and problem solvers, more skillful decision makers and able to relate to others more effectively.
2. Project seminars are designed to assure that students pursuing separate projects in a common field of study (such as Life Science or Social Sciences) can share their questions, issues, problems and experiences in order to broaden their understanding of the field.
3. Workshops are conducted as needed for students with common needs or interests. Workshops help students prepare for employment interviews, college entrance examinations, job seeking, resume writing, etc. Small group workshops may also be used in place of tutorials for instruction in basic skills, foreign language, advanced math, etc.
4. Group projects enable students to combine their interests and skills in planning and carrying out a project with shared objectives.

Northwest Regional Educational Laboratory

The NWREL/EBCE model has the following activities to give students opportunities for group interaction:

1. World of work seminars bring community adults to the learning center to discuss important employment and economic issues with students.
2. All-student meetings are held weekly to share announcements and plan upcoming events.
3. An annual student retreat in the fall lets students and staff build group feelings, sharpen group problem-solving skills and open up channels of communication and trust.
4. Evening gatherings with parents and community volunteers give students the opportunity to host visitors at the learning center and explain EBCE.
5. Group debriefings following student career explorations enable students to share their observations, opinions and reactions to site experiences.

Research for Better Schools

Group instruction is utilized in each of the three program components. Groups of 10-15 students participate in career exploration experiences. While moving through these experiences, it may become necessary to divide the students into smaller units to work on individual projects. (Ninth through twelfth graders may be mixed for career exploration activities.) Students are also grouped in regularly scheduled guidance sessions. The Academic Resource Center is individualized but uses small group instruction as one learning mode.

Certification of Learning

Each program has its own procedures for documenting student experiences in EBCE. The purpose of the credentialing process is to provide a record of learning accomplishments that is comparable to a regular high school transcript.

Appalachia Educational Laboratory

AEL has created detailed procedures and documents for working with parents and state and local education agencies to translate EBCE experiences into high school credits and grades.

Accountability is essentially maintained through three sets of mechanisms:

1. forms and worksheets which capture or summarize all individual student curricular decisions (courses, sites, needs, goals, activities and evaluation criteria).
2. evaluation procedures and documents which use EBCE staff, students, resource persons, parents and school personnel to continuously track, measure and record student performance and learning
3. materials and procedures approved by the school system to translate individual student activities and performance in EBCE clearly into standard Carnegie course credits and grades to be entered on students' high school transcripts

Upon satisfactory completion of EBCE each student receives a regular diploma from the home high school and a Career Education certificate.

Far West Laboratory

The guidelines and criteria provided in Project Planning Packages enable school districts to translate EBCE activities into credit for standard high school subjects. When constructing their project plans, students indicate the type and amount of credit planned, subject to the approval of their learning coordinators. Each completed project is evaluated by learning coordinators, resource persons, skills specialists and any other designated certifiers. When a project is successfully completed, credit is assigned in the subject area designated and entered on the official transcript. Other EBCE activities such as workshops, tutorials and seminars also yield academic credit upon successful completion and evaluation.

Rating scales and checklists are used to monitor students' progress toward and completion of EBCE competence requirements in reading, writing, quantitative skills, oral communications, career decision making and career awareness. The learning coordinator certifies students' competence in each area based on observation, evaluation of productive work and verification from resources, tutors and other EBCE staff.

Northwest Regional Educational Laboratory

NWREL/EBCE has a well-defined set of procedures and documents for recording and reporting student progress in the program. EBCE staff have also developed guidelines for translating student work into Carnegie units of credit when needed for placement purposes.

Grades are not assigned and student work in the program is not routinely broken out into standard courses and units of credit; instead, students are required to complete their work at performance levels appropriate to their abilities and goals. Evaluation criteria for each learning activity are individually negotiated between student and staff, and each completed learning experience is then evaluated and certified according to those criteria by the appropriate persons--including staff, parents and community resources.

When students exit the program, they receive a certification portfolio that contains performance information needed by parents, high school placement officials, potential employers and college registrars. Graduating students also receive a standard high school diploma. Transfer procedures have been developed between the program and the parent school so EBCE students can reenter the regular high school program, if desired.

Research for Better Schools

The RBS/EBCE instructional components are part of the regular secondary school curriculum. Credit for courses students complete through field experiences can be determined at the discretion of school administration. At the RBS demonstration site, department heads and other staff certify course content students have learned in the field.

Role of Community Participants

EBCE programs must have the cooperation of community resource persons, organizations and experience sites to provide community-based learning activities for students. Community participants are central to program operation.

Appalachia Educational Laboratory

In AEL/EBCE the community literally becomes the school as students spend approximately 80 percent of their time learning at various experience sites. Once a student is placed in a specific work situation, an EBCE resource person begins working with the student on a one to one basis in the following ways:

1. answering questions about the work situation to help the student complete activities in the Student Career Guide
2. helping the student work on activity sheets involved in completing site related projects
3. filling out a Student Evaluation Form to assess the student's progress and record attendance
4. providing the student with special types of tutoring and demonstration in specific areas of expertise

AEL has developed a systematic experience site analysis approach designed to yield the types of cooperation described above.

Far West Laboratory

Whether an arc welder or lawyer, printer or biologist, the resource person's primary role is to help students become adults, learn how to think for themselves, make responsible decisions, relate maturely to others and plan and carry out their own learning projects.

The relationship between resource person and student is voluntary on both sides and is defined by a set of mutually understood expectations and consequences. Its scope, objectives and duration are negotiable--depending on the resource person's availability and the student's educational needs and interests.

Resources work closely with staff to identify potential learning activities and projects at their site. They provide feedback to staff on student performance and products. Community participants also serve on a policy advisory board, providing recommendations to staff on policies and procedures and helping to generate and maintain community support.

Northwest Regional Educational Laboratory

NWREL/EBCE involves the entire community in its design and operation:

1. Business and labor people from the community, students, parents and school district representatives all share in program planning and policymaking.
2. Citizens in the community help to generate and maintain public support for the program.
3. The community provides the learning sites that are used by students to meet personal and program objectives. Working adults at these sites serve as "instructors" for the students. They help students learn, counsel them, provide help on special problems and give feedback to staff on student performance.
4. Community resource people with expertise in the various "survival skills" or competencies specified in the curriculum certify satisfactory student acquisition of those skills.
5. Business and labor representatives participate in student seminars on world of work issues.
6. Individuals from the community frequently tutor individual students in academic subjects and areas of student interest.

Research for Better Schools

The RBS approach to EBCE requires community participation for four basic tasks:

1. leadership in developing public support for the program and initially recruiting participants.
2. leadership in defining and designing career exploration and specialization opportunities and revising them as necessary
3. filling instructional roles for career exploration and specialization courses (program staff retain supervisory roles)
4. helping the schools organize and develop an administrative mechanism for fostering ongoing community participation and assuring effective use of community participants

Recruitment Process

An EBCE program needs a network of community sites that can accommodate student interests and program requirements and provide a representative selection of careers. Procedures are needed to present the EBCE concept to the community, contact a range of sites and secure their commitment to participate in the program.

Appalachia Educational Laboratory

AEL has created two different approaches to the recruitment of sites and resource persons:

1. The "front runner" approach utilizes individuals who are prominent in the community to obtain initial agreement from top officials at various sites. EBCE staff then conduct actual site analysis and final discussions.
2. In the "music man" approach, EBCE personnel who are well versed in program site development make contact with larger groups at general meetings, followed by indepth discussions and recruitment.

Both approaches have been highly effective for AEL.

Far West Laboratory

The FWL/EBCE model seeks both individual volunteer resource persons and commitments from resource organizations. If an individual volunteers, this contact is used as a base for eliciting organizational commitment. If an organization agrees to participate, the program seeks individual volunteers within it. In either case, the goal is to recruit individuals eager to work with students on a one-to-one or small group basis.

Recruitment of an initial pool of resources begins with personal contacts by program staff and supporters, combined with presentations to community organizations. Individuals and organizations interested in participating are identified and arrangements are made for personalized orientations and site analysis interviews.

To provide a balanced pool of resources, FWL has developed procedures for determining the kinds of sites needed to meet student interests and academic needs and for identifying potential resource sites in the community. The program has also developed strategies for contacting sites, a suggested format for the recruitment interview, site selection criteria and procedures to assist students in adding to the pool by recruiting their own resource people.

Northwest Regional Educational Laboratory

Program staff personalize their recruiting efforts by enlisting community leaders, parents and members of the program planning/advisory group to help identify potential learning sites and write letters introducing the program. Staff then take responsibility for conducting personal recruitment interviews and recording site information for use by students and staff, following established program procedures.

A variety of sites are recruited to meet students' tentative career interests, which are determined through assessment, expressed interest and staff estimates. The network of employer/community sites resulting from initial recruitment efforts is sufficient in number (roughly two learning sites per student) and variety to allow student selection of multiple learning experiences in related job fields as well as among different occupations.

Employers are given choices as to the extent of their involvement with students but are asked to make a specific commitment regarding the nature of the learning experiences they can offer. They sign a Letter of Intent to participate in the program and designate appropriate "community instructors" to work with students.

Research for Better Schools

The recruitment process is determined by the number of available resources within a given community and the needs and interests of both the participating school and EBCE students. Program staff identify persons, resources or organizations such as Chambers of Commerce, business or labor groups or a cadre of influential citizens that might be interested in working cooperatively with education. Such persons and/or organizations identify potential resource sites and suggest how to access those sites. Program representatives then carefully articulate their needs to resource site staff. A policy commitment to participate in the program is made at the management level and one person within the resource site agrees to meet with school staff to begin planning for program involvement.

Resource Person Development and Maintenance

Preparation is needed to prepare community resource persons for their program involvement and assist them during the program year. This support helps resource persons provide appropriate direction and assistance to EBCE students.

Appalachia Educational Laboratory

AEL/EBCE offers several ways to provide resource persons with the information and insights they need to work effectively with students. A Guide for Resource Persons summarizes key information about EBCE generally and about the resource person's responsibilities within the program. Initial direct contact with resource persons usually occurs as the site is being analyzed or as a new resource person enrolls within an existing site. Continuing resource person development occurs as the learning coordinators make site visits. Periodically, EBCE provides group seminars for resource persons to exchange information, generate ideas and discuss problems and concerns. The EBCE staff also maintain periodic telephone contact with resource persons and encourage them to call the learning coordinators if they have questions or concerns. Lengthy and formal training sessions for resource persons are not held, primarily because the resource persons themselves judged such sessions to be unnecessary.

Far West Laboratory

Program staff work individually with newly recruited resource persons to help them understand the underlying concepts of EBCE, its goals and how the program operates, as well as to determine with them how they can best help students. The resource persons' participation in defining their own roles is a key element in preparing them to work with students. A Guide for Resource Persons and Community Organizations helps orient resources to the program and serves as a reference as they help students plan and carry out their individual or small group projects.

As resource persons work with students, learning coordinators monitor student progress to obtain information from the resource and provide personalized feedback that enables resources to evaluate and improve their work with students. The resource analyst maintains regular contact with program resources and troubleshoots any problems. Ongoing liaison is also maintained, through newsletters and open houses, where resources can share and discuss their experiences and strategies for working with students.

Northwest Regional Educational Laboratory

Community resource persons are selected to work as "instructors" with students on the basis of their interest and available time. NWREL/EBCE then provides resource persons with staff support, program information, skill development and contact with each other so they can successfully guide, negotiate with, instruct and evaluate students. This development is accomplished through a planned, integrated series of four group meetings held approximately once a quarter during the program year.

Program staff also contact each learning site at least once a week for routine site maintenance, during which they respond to individual questions, needs, concerns and suggestions that arise as the community instructors work with students.

This combination of planned development sessions for resource persons and staff monitoring of student onsite activities guarantees a productive learning environment for EBCE students.

Research for Better Schools

Group orientation and training of community participants takes place before students begin their field programs. Training sessions are conducted by school staff in a series of seminars focusing on program goals and objectives, site analysis, implementation, learning activity development, program maintenance and evaluation. (If time and staff are limited, school staff can orient and train community participants individually as programs are developed.)

School staff continue to meet regularly with their community counterparts until the latter gain experience in dealing with students. Contact is then maintained on a less regular basis throughout the school year.

Site Analysis

The career and academic learning opportunities at each cooperating community site are systematically analyzed and documented to insure that students will receive bona fide and meaningful learning experiences when visiting sites of their choice.

Appalachia Educational Laboratory

AEL/EBCE has created and refined a system for experience site analysis which (a) has been tested with over 500 sites in several states, (b) can be completed within a matter of hours, (c) provides full documentation on learning potential at any site and (d) generates the data needed for students and program staff to make knowledgeable and accurate decisions about site placements and site activities. The product of this analysis is an Experience Site Learning Guide for each site. These guides contain basic logistics on the site, general information and relevant requirements (e.g., dress code, transportation), capsule descriptions of each segment of the experience site and detailed descriptions and summaries of the academic and career learning activities a student can undertake with that resource person. These data, in fact, provide EBCE students with a learning guide for each site and allow students and learning coordinators to select sites and resource persons as well as to generate detailed specifications of learning activities.

Far West Laboratory

Through informal but probing interviews, program staff work with resources to identify a range of learning activities the resource can offer students, to expand their career and self knowledge, apply their basic skills in real life situations, research topics or issues of interest and acquire conceptual and technical knowledge in academic and career areas. Learning activities are tailored to the resource person's interests, expertise, work and schedule. The business administrator with a degree in political science may be willing to work with students either on business or government projects. The letter carrier who writes poetry may only be interested in sharing avocational interests. The carpenter with an avid interest in photography may be able to help students acquire skills in either area. The FWL/EBCE model capitalizes on resources' experience and expertise whether directly related to their current work situation or not.

The range of learning activities identified by the staff member and resource are spelled out in Resource Guides. In designing their projects and planning their work with the resources, students may choose from these options or work out others with the resources, subject to the approval of staff.

Northwest Regional Educational Laboratory

NWREL/EBCE has developed a Learning Site Analysis Form (LSAF) and process to identify potential learning activities at each community site in the program. The analysis is completed by a program staff person and community instructor working together to identify job requirements, characteristics and tasks in a descriptive format usable by staff and students. Of particular significance in this process is the breaking down of the community instructor's job into major tasks, subtasks and basic skills functions that a student could perform. The staff person conducting the interview records this information on the LSAF, which is then used in writing learning objectives and project activities for individual students to complete at that learning site.

Research for Better Schools

School staff work together with resource people to inventory the available resources in the community and assess the learning potential of those resources. RBS has developed a Site Analysis Survey Form which is used in conjunction with predetermined content objectives for students' field experiences. The information drawn from the Site Analysis Survey Form and matched with the objectives for the field experiences forms the basis for program development between resource site personnel and school staff.

Site Utilization

Student learning experiences at community sites can range from observation to extensive hands-on activities. Sites are involved in student learning to the extent that their resources and capabilities permit.

Appalachia Educational Laboratory

Students spend an average of 80 percent of their time (four days out of five) learning at community experience sites. These sites provide the environment and opportunities for both career and academic learning. The basic learning possibilities are established through the site analysis process and documented in the Experience Site Learning Guide. With this information the EBCE learning coordinator and each student create a series of Activity Sheets which identify the academic courses, career areas and specific activities the student will pursue while at the site. Each Activity Sheet generally covers a one to three-week period. The resource person receives a copy of the Activity Sheet and thus knows what can be done to help the student learn. The learning coordinator visits the site at least once during the student's placement. Upon completion of the placement, the resource person submits a formal evaluation of the student's activities, progress and performance.

Far West Laboratory

Students select the resources they will visit and use in their projects based on their current needs and interests. On a single project, students may work with several resources at different levels of depth and duration.

The orientation level or short-term arrangement allows the student to become acquainted with resource persons and their organizations and discover what can be learned there--or simply to supplement research on a project where the student is more intensively involved with other resource people. Students must plan their orientation visits by identifying questions they will seek to answer on a project sketch, which may or may not lead to a full-fledged project.

The exploration level allows the student to arrange several more visits with a resource to survey a career or area of study.

At the investigation level, which may last a full school term, students can focus on indepth research or on mastering selected career or academic skills. At both the exploration and investigation levels, students must work with their resources and learning coordinator to develop a project plan specifying what they will do and learn, performance and products expected, deadlines, evaluators and evaluation criteria. Students are encouraged to use more than one resource on a project whenever possible.

Northwest Regional Educational Laboratory

Employer/community sites formally recruited into the program are used by students in four ways for both academic and career learning. Students' first experiences at job sites of their choice are organized as career explorations, during which they proceed through a logical process of investigation and assessment using an Exploration Package. A learning level gives students the opportunity to gain more extensive experiences at sites they have already examined on explorations. An optional skill building level may follow a learning level at a site but is not required for all students (it allows development of entry-level job skills for those who desire them). An optional special placement often runs concurrently with other site placements and uses employer and community sites for other than specific career skill purposes (completing specific project activities, for example).

Exploration and learning level sites are consistently used for student work on projects--individualized, problem-centered guides that help each student blend learning objectives from Basic Skills, Life Skills and Career Development into specific activities to be completed primarily onsite. The optional skill building and special placement levels are also incorporated into student learning plans through project activities.

Research for Better Schools

The RBS model organizes a resource site into two experience levels. The first is career exploration where groups of from 10 to 15 students are involved in preplanned field experience activities within career clusters they select. These explorations enable them to see a variety of careers during the school year. The second level of site usage is specialization, which consists of individualized, in-depth experiences and hands-on activities for students after they have completed explorations.

Range of Career Options

EBCE programs need community site networks and procedures that allow their students to select and explore a variety of careers.

Appalachia Educational Laboratory

AEL/EBCE uses the U.S. Department of Labor's Worker Trait Group system and a series of related diagnostic tests to assure student awareness of maximum numbers of careers. The AEL experience site analysis procedures then provide a way to classify the resource person's job title into the appropriate Worker Trait Group and describe the learning opportunities and possibilities in detail. Cross-referencing and documentation materials assure that students can easily find all the relevant data. Students first relate their career interests, aptitudes and temperaments to specific Worker Trait Groups. They then identify the available sites and job titles within those groups and obtain detailed information about any or all related jobs and careers.

Far West Laboratory

The range of careers available for direct exploration will, of course, depend on the resources available in any locale. Far West has developed procedures to aid an EBCE staff in developing a balanced pool of resources representing different kinds and levels of careers as well as offering learning opportunities across a variety of subjects and disciplines.

Students choose from among a broad range of jobs and careers (sites) for orientation, exploration and investigation activities. Whatever the focus of their project work, the Project Planning Package provides an annotated list of already developed resources. If different or additional options are desired, other sites can be recruited and added to the network, either by the student or by program staff.

Students may work with as few as three or as many as ten or more resources during a school term, depending on the number and type of projects planned. Students are required to explore at least six occupations each year they are in the program.

Northwest Regional Educational Laboratory

Incoming students' indicated career interests are the starting point for determining the types of sites needed for the NWREL/EBCE program. Staff recruit a "network" of community sites representing a wide range of careers and occupations. Students then choose the sites they will visit, based on expressed and assessed career interests. Additional sites are recruited whenever needed.

Students are encouraged to explore and compare as wide a range of careers and jobs as possible. They learn firsthand about particular occupations through individual career explorations and in-depth learning level experiences at the exploration sites of most interest to them.

Although they must explore a minimum of five sites per year, students are not required to explore a specified number of occupations in a particular category or cluster. Similarly, students are not asked to focus on a potential future career, but rather to expand their career interests through a variety of experiences. One student's request for an auto mechanics site began with an exploration of a service station, moved to a car dealership, then to a diesel shop and finally to a computer maintenance facility--all from an initial interest in "repair."

Research for Better Schools

The range of career options provided by RBS/EBCE depends on the number of employers and community resource sites recruited for the program. RBS/EBCE seeks to give students opportunities to sample as wide a range of careers, occupations and job functions as possible. To do this, students' exploration activities are organized within clusters of careers and occupations. Each term the student selects a career cluster for which employer/community site experiences have already been planned by program staff. If the student becomes particularly interested in one job, site or career while completing group exploratory experiences in a given cluster, an individualized specialization placement can be arranged to allow the student more substantive participation in those activities.

Student Accountability

EBCE programs need an accountability system that acquaints students and staff with their obligations and responsibilities and provides guidelines for establishing realistic student goals and milestones and dealing with student/staff problems.

Appalachia Educational Laboratory

AEL addresses student accountability in two ways: through clear and mutually agreed on statements of objectives and time frames and by viewing student responsibility and behavior as part of the learning process rather than as something that interferes with learning. The Student Program Guide and several other documents and forms clearly specify student learning objectives, learning activities, program decisions and goals and evaluation criteria. Formal cycles of program review and updating take place, separated by maximum intervals of nine weeks (review and updating occur more often for students with a record of difficulty). Both the learning coordinators and any supplemental counselors are trained to treat poor performance as a learning opportunity for the student. For example, the learning coordinator might assist students having difficulty by altering their program or by creating new learning activities that focus on the difficulty. Becoming increasingly independent and responsible can thus become an important learning goal for the student in and of itself.

Far West Laboratory

The first step in helping students act as responsible adults is to begin treating them as adults--capable of thinking, making decisions, planning their work and accepting responsibility for their own actions. The role of staff is to assure that students possess sufficient information, examine alternatives and understand the sure or likely consequences of different actions so they can make informed decisions and commitments.

The FWL/EBCE model provides a structure within which students and staff make decisions and are held accountable. Program handbooks assist by identifying the kinds of decisions that need to be made, discussing tradeoffs, specifying standards for student programs and projects and providing a procedure for monitoring student performance and handling problem situations.

A key tool in this process is a performance-based credit assignment system that is flexible enough to accommodate individual student interests and learning objectives, yet rigorous enough to enable staff to hold students accountable to plans they participate in making.

Problems with student progress or behavior are treated as learning situations. The student is led to analyze the problem, its causes and consequences, then to examine alternatives and make his or her own decision (with staff and possibly parental approval) about what course of action to take.

Northwest Regional Educational Laboratory

The NWREL/EBCE student accountability system defines program expectations regarding student learning and behavior in terms of choices students must make daily to progress in their learning plans. The system clearly specifies student responsibilities relating to performance and behavior and suggests the kinds and sequence of consequences students can expect if they do not meet their responsibilities. The emphasis is on helping students make decisions, be responsible for their own actions and make satisfactory use of their time.

With staff assistance, each student maps out specific learning objectives in stated time frames. Staff meet regularly with students to review their progress. Staff also meet regularly among themselves to discuss student growth and behavior and develop positive courses of action. Students receive both personal acknowledgments of work well done and staff support in dealing with any difficulties.

For all accountability issues, NWREL/EBCE has developed a process whereby students, parents and staff negotiate courses of action that will reconcile student behavior and program expectations in ways that respect both the individuality of each student and the needs of the community-at-large. Staff consider the student accountability system--and the negotiation that is part of it--as an important guidance tool, a mechanism for turning every behavior into a learning experience.

Research for Better Schools

Students in the program are responsible for mastering the performance objectives in their individualized math and English programs; for securing information about jobs, occupations and careers while on resource sites; and for information processing, decision making, problem solving and, finally, self evaluation. EBCE staff help students understand their responsibilities in each of the three curriculum areas and follow regular school policies and procedures in dealing with problems.

System of Guidance and Counseling

Guidance and counseling encompass many aspects of delivering and monitoring a personalized program for each EBCE student. They insure that each student's program is based on personal needs and interests, and they provide direction and assistance to each student for career and academic decision making.

Appalachia Educational Laboratory

AEL/EBCE instructional procedures and materials weave key aspects of guidance and counseling into all student learning. The following factors help to create an environment and set of experiences where learning and guidance/counseling are essentially one continuing event:

1. the inquiry process/rational thinking strategy built into each Activity Sheet
2. the interactions between self-knowledge and directly experienced career information and insights
3. the fact that program decisions are based on individual student needs and interests
4. careful documentation of student learning
5. the one-to-one learning situations, whether with a learning coordinator or community resource person

Small group guidance and counseling sessions supplement the individual growth and direction that flow out of the EBCE learning process. Access to a professional counselor (primarily using the local high school's counseling program) is also important, both for individual students and to provide ongoing inservice training and consultation to program staff.

Far West Laboratory

The guidance and counseling procedures of FWL/EBCE include the following major components:

1. initial and ongoing assessment of students' learning needs, interests, capabilities and goals
2. long-term and short-term program planning, including individualized projects using employer/community resources
3. procedures for monitoring students' activities and growth to identify and resolve problems, assess competency and re-evaluate interests and needs
4. criteria and procedures for awarding credit for completed student work

These procedures are implemented through individual conferences, advisory groups and project seminars, with the joint participation of students, learning coordinators and resource persons.

The learning coordinator performs a combined teacher/counselor function, helping students make informed decisions about their own education on a daily basis and helping them develop the skills they need to pursue their own goals.

Northwest Regional Educational Laboratory

Guidance in NWREL/EBCE is integrated in all learning activities, and interaction between program adults and students is fundamental to the career and personal development of each student. The emphasis is on helping students develop the attitudes and habits that will enable them to function as independent adults.

Guidance begins with student orientation and continues through:

1. the ongoing cycle of individual learning plan development (assessing needs and interests, negotiating, and prescribing learning activities, evaluating performance and integrating experiences)
2. the student accountability system
3. systematic monitoring and documentation of student learning and feedback to students and parents
4. staff procedures for keeping each other informed concerning student behavior and personal growth
5. periodic group counseling/guidance activities for staff and students

Every staff person, parent, community instructor, competency certifier or other resource person serves an important guidance function in the normal course of each student's EBCE activities. In addition, specialists from the local high school and/or community provide indepth professional help when needed.

Research for Better Schools

Guidance and counseling in RBS/EBCE are delivered through the Career Guidance component of the curriculum. This component helps students acquire the self-evaluative, problem-solving and decision-making skills they need to assess and relate their experiences in and outside the school to their own career development and to public issues. Usually scheduled in one or two 50-minute sessions per week, guidance activities include both individual guidance and counseling and group work with a process skills curriculum called "Career Clarification: A Problem-Solving Approach."

Parent Relations

Parents are involved in their children's EBCE program in various ways--from granting permission for program participation to being regularly informed of student progress and evaluations. Parents are also active members of EBCE advisory groups.

Appalachia Educational Laboratory

The parents of enrolled students are involved in virtually all aspects of their children's program:

1. Both parental and student approval are required for program entry, and parents participate in orientation sessions and one-to-one discussions with program staff before such approval is requested of them.
2. The EBCE Community Advisory Council, which functions in an advisory and program resource capacity, includes parent representatives.
3. Written reports of student activities and progress are provided to parents on a quarterly basis.
4. Special parent-student conferences are held any time a student's performance suggests that personal, in-depth conferences would be useful.
5. Parents are invited to participate in career-oriented seminars and special presentations.

Far West Laboratory

Parental support and participation are encouraged in many ways:

1. Parents of prospective EBCE students are invited to program orientations so they can make informed decisions about their son's or daughter's participation.
2. Staff regularly schedule individual parent conferences regarding student progress and make periodic telephone contacts.
3. Parents receive copies of their students' program plans and end-of-term progress and credit summaries.
4. Parents are encouraged to offer their experiences and expertise to all EBCE students by becoming resource persons.
5. Parents are invited to program orientation sessions and open houses.
6. Parent representatives sit on the program's policy advisory board.

The program maintains regular communication with parents to promote their involvement, regardless of the parents' expectations from the program and level of interest in their child's learning activities.

Northwest Regional Educational Laboratory

Beginning with initial student recruitment, NWREL/EBCE involves parents actively in the program. Parental permission is required for students to enter EBCE. Staff interact with parents several times before that permission is sought to insure that they, as well as the student, understand what the program can offer and will require.

Throughout the year, staff/parent communication is immediate and ongoing. Parents are regularly apprised of student learning plans and progress through a combination of written reports, personal telephone calls and periodic conferences at the learning center. Program staff elicit parent opinions and suggestions and involve them in guidance decisions. Parents receive a program newsletter; are invited to an orientation session at the learning center each fall; attend occasional other gatherings with staff, students and community resource people; and are represented on the program's governing board.

Research for Better Schools

RBS/EBCE parents are actively involved in many facets of the program. Parental signatures are required before students become eligible for enrollment. Staff interact regularly with parents to assess student progress and solicit parent input. Parents are seated on the RBS advisory group and have also formed their own parent advisory group. The parent advisory group helps and encourages students by the following activities:

1. articulating program concerns to school administration
2. helping students bridge the gap between learning in school and learning in the community
3. helping the program relate to other groups within the community
4. helping to recruit community participants
5. providing social activities for students

Student Recruitment and Population

The EBCE programs have developed techniques for identifying, contacting, interviewing and selecting students into the program and for presenting information on the concept and program to prospective students and their parents.

Appalachia Educational Laboratory

AEL/EBCE has used many methods for recruiting EBCE students, ranging from presentations to the student body and referrals from guidance counselors to in-school "booths" and radio and television ads. Evaluation data indicate that AEL/EBCE is effective with the full cross section of student abilities, ranging from National Merit scholars to low achievers and potential dropouts. EBCE appeals to this diverse group, both initially and on an ongoing basis, because of the wide range of opportunities offered in the program--individualization, community experience, a nonclassroom setting, etc. The specifics of the program are explained to both students and parents during the recruitment period, usually held in the spring and near semester transition.

Far West Laboratory

The FWL/EBCE model was designed to accommodate a broad range of student interests, abilities and backgrounds. The pilot operation of the program was targeted to a cross section of senior high school students in terms of past performance, future plans, ethnic group, sex and socioeconomic backgrounds. FWL found that all kinds of students (though not every student) could profit from an experience-based, career-oriented, student-centered curriculum and that a diverse student body yields important educational benefits through informal exchange among peers.

Some districts have, however, decided to implement a FWL/EBCE program to serve the needs of a particular academic or socioeconomic group. The Student Recruitment Handbook discusses the effect of different target populations on program resources. For example, a high proportion of poor readers requires a lower staff/student ratio as students will need more assistance in understanding Resource Guides and developing project plans.

Northwest Regional Educational Laboratory

NWREL/EBCE is a voluntary program designed to serve students within the total range of academic ability, career aspirations, dependability and motivation. Within these parameters, recruiters emphasize that EBCE students must be willing to work with a variety of adults, learn in a variety of settings, be able to adapt to new learning styles, work in an individualized program and be responsible for themselves and their work in the program.

These expectations and the program itself are explained to prospective students and their parents through letters to parents, presentations at the high school and followup discussions with those who are interested. Students are able to see the differences between EBCE and the regular high school program and decide which is the better alternative for them.

The program has developed a student application form and questionnaire that provides information useful for baseline evaluation data and for general descriptions of the student population. The form can be used by any EBCE program.

NWREL/EBCE uses a random selection process to arrive at the required number of participants from among program applicants.

Research for Better Schools

The RBS program has been developed as a regular curricular or course option for any secondary school student interested in finding out about careers. Students participating in the program reflect the student population that would be found in any high school, ranging from bright, highly motivated students to underachievers and poorly motivated students.

Students may learn about the program in a variety of ways, including listings on course offering sheets, referrals from school staff, presentations by students and school staff, advertisements and word of mouth. Since the program is offered as part of the regular instructional program at school, normal channels of communication are also used.

Policymaking

The programmatic guidelines that will govern EBCE operation within a given community should be established with input from all sectors of the community.

Appalachia Educational Laboratory

In order to effectively and fully involve the total community in an EBCE program, AEL/EBCE strongly urges adopting school personnel to establish and then use a community advisory council (CAC). AEL/EBCE has utilized a CAC since the program's inception and has found its members to be of invaluable assistance to the program.

Composed of representatives from business and labor, school officials, parents and students, the council is not an autonomous policymaking group but rather facilitates program operations by identifying community resources and personnel and serving in an advisory capacity to program personnel. AEL has developed materials which describe the composition and role of a community advisory council and explain how program adopters can establish such a council.

Far West Laboratory

The FWL/EBCE model provides for a special policy advisory board. The board provides recommendations to the staff on program policies and procedures and helps elicit and maintain community support.

Each district will need to decide whether to create a separate EBCE advisory group or use established program advisory councils. In all cases, the program will operate within policies and procedures set by the school board or other duly constituted authority.

Northwest Regional Educational Laboratory

Because EBCE is community-based, employer, labor and citizen representatives participate actively with professional educators in operating the program. To keep the program responsive to the needs of all participants and the community, the following all have a voice in policymaking:

1. A community program planning group, consisting of school and community representatives, made decisions and set parameters as NWREL/EBCE was taking shape.
2. A program governing board, consisting primarily of community members with representatives from parent, student and school sectors, evolved from the planning group and makes ongoing policy-level decisions about program operations. (In districts adopting the NWREL/EBCE model, the program is also being successfully administered by the school district board, with a community-based EBCE advisory group.)
3. The program director and staff work with students and the governing board to make decisions affecting day-to-day operations.
4. Students in the program make suggestions and recommendations both to the staff about daily program operations and to the governing board concerning policy decisions.

Research for Better Schools

Programmatic guidelines for RBS/EBCE are formally established by the school board. In addition, RBS/EBCE has a community advisory group that maintains a working, cooperative relationship between the school and community. The advisory group serves several purposes, including helping to promote public acceptance of the program, aiding in recruitment and maintenance of community resources and organizing support for continuing program development. The advisory group consists of representatives from business and industry, labor, the community, parents and education.

Staffing Considerations

This area is concerned with identifying the responsibilities, roles and numbers of staff needed for effective delivery of the EBCE program.

Appalachia Educational Laboratory

AEL/EBCE is based on a unitary staff role, rather than use of various staff specialists. Within AEL's program, learning coordinators have full and direct responsibility for developing, maintaining, evaluating and updating all aspects of a student's learning program, both career and academic. The materials and procedures are structured so that each learning coordinator can provide these services for up to 20 students.

An experience site recruitment and analysis capability is also required; however, experience has shown that this role can be adequately performed by the learning coordinators on an ongoing basis, once the program is underway.

Access to a school counselor to handle special counseling needs and/or group counseling sessions is important.

Administrative supervision can generally be provided by a "lead" learning coordinator in most EBCE programs. This individual can also be responsible for ongoing visits to experience sites and for carrying out the guidance/counseling functions to the degree that they are an integral part of student program planning and decision making (e.g., self-assessment of career aptitudes).

Far West Laboratory

Experience has shown that FWL/EBCE can be staffed at the same staff/student ratio as is used in a comprehensive high school program. While staffing patterns vary from district to district, the following staff functions are necessary:

1. learning coordinator--responsible for coordinating the students' total learning program (each LC works with between 20-30 students)
2. resource analyst--responsible for recruiting, analyzing and maintaining the pool of resources
3. director--administrative coordinator and staff supervisor
4. skills specialist--coordinates individualized supplementary activities such as tutorials, workshops and instructional materials

These functions can be combined in various ways depending on the size of the program and needs of the district. At one site, the program director is also the resource analyst. At another, learning coordinators share the skills specialist function. At another, learning coordinators share responsibility for helping students plan acceptable projects with regular academic faculty who retain authority for credit assignment within their discipline.

Northwest Regional Educational Laboratory

In NWREL/EBCE, staff function more as facilitators or managers of learning than as instructors. They supervise the lay "teacher" role filled by community resource people and help students plan individualized programs of study.

An EBCE staff may vary from program to program but essentially includes individuals to administer the program and provide team leadership; work directly with students to develop and monitor individual learning plans; recruit, develop and maintain community sites for student learning; locate people, places and materials that may be used by students as learning resources; and coordinate various student services, including assessment and guidance.

These staff roles may have various titles. In the original model, staff have included program administrator, learning manager (LM), employer relations specialist (ERS), learning resource specialist (LRS) and student coordinator. Many districts now implementing the program are combining the roles in new ways--an LM/ERS, for example, or LM/student coordinator.

In NWREL/EBCE, each LM has been working effectively with approximately 30 students. Each ERS has been maintaining 50-60 learning sites and monitoring the learning activities of the students who choose those sites.

Research for Better Schools

The RBS model emphasizes the use of existing school staff with some restructuring of traditional staffing patterns to fill the following EBCE roles:

1. program administrator--managing the program; maintaining relations with the host school, parents and students; providing leadership
2. ARC teachers--responsible for instruction in the Academic Resource Center
3. ARC aides--providing clerical support for the ARC teachers, maintaining student files, scoring student workbooks and organizing materials and equipment for use
4. counselors/resource coordinators--responsible for conducting guidance groups, developing career development activities and training community participants

EBCE requires personnel who will be skilled in working with resource sites and people, counseling students individually and in groups and facilitating learning, rather than serving as "teachers." With adequate orientation and training, existing school staff have been able to restructure their roles to meet program needs.

Facility/Transportation

Program planning must include identification of facility needs and procedures for coordinating student transportation to and from community sites.

Appalachia Educational Laboratory

The key to the success of any EBCE program lies in student mobility. Students must have some method of transportation available to them if they are to access community sites successfully. Multiple strategies can be utilized to address the transportation issue. Communities with a good system of public transportation can usually make arrangements for student use of that system. School buses, vans and student and staff cars also prove useful. Programs located in a separate facility rather than in a high school should seek a central location in the main business district to reduce some of the need for transportation. In each adopting district AEL's experience has been that a student who really wants to be in the EBCE program will "find a way to get from here to there."

Far West Laboratory

Whether located in a school or separate facility, the program should have an EBCE center or "home base" where students can plan community activities and assess their experiences.

Generally, an EBCE program requires less space than a program of traditional classroom instruction. It is important, however, to provide for the following:

1. private offices or cubicles for professional staff where they can have confidential conferences with students, resources or parents
2. meeting rooms for advisory groups, project seminars and other small group activities (a program needs approximately half as many meeting rooms as it has learning coordinators)
3. quiet study space for students
4. storage space and security for student records and other program materials and equipment (e.g., cassette tape machines for programmed instruction materials)

The Far West version of EBCE can accommodate student use of local transit systems, vans or private autos, depending on the needs of the community. Most FWL/EBCE programs provide their students with tickets or tokens for using available public transportation.

Northwest Regional Educational Laboratory

In NWREL/EBCE, a learning center--located either in the high school or in the community--provides the home base for many student learning functions. It should be organized to provide:

1. office space for staff-student interaction
2. space for instructional materials and student records
3. a gathering place for students, staff, parents and community members

Wherever the learning center is located, transportation options must be planned to allow easy student access to the community. Transportation options that have been successfully adopted by districts using the NWREL/EBCE program include city transit systems, personal or family auto, student car pools, a program-sponsored vehicle, school district buses, volunteer adult drivers and employer vehicles.

Research for Better Schools

As part of a school's curriculum or a program within a school, RBS/EBCE operates from the school campus. Community resource sites must be identified, recruited and utilized within a geographical area that permits student flexibility. Adoptors have used public transportation, school buses and program-sponsored vehicles to transport students to and from resource sites. Planning career explorations for groups of students also helps to reduce transportation problems.

Insurance

Program planners must analyze insurance needs and requirements in relation to the EBCE student's learning activities in the community.

Appalachia Educational Laboratory

AEL/EBCE has met insurance questions with several different provisions, including Workmen's Compensation, private insurance, school insurance coverage and written agreements with participating community sites. The two main considerations are to protect the student in case of injury and to minimize the employer/experience site's liability. AEL's experience has indicated that a 24-hour limited health coverage policy (such as that carried by high school athletes) fills the need for health and accident insurance for program students. The employer or experience site must assume some liability for students who are on the premises. However, that liability is no greater than the liability assumed regarding visitors or tours to the business.

Far West Laboratory

Each FWL/EBCE site to date has found its own approach to providing insurance coverage. EBCE program personnel are advised to confer with district administrators, particularly the schools' legal officer, to determine if district policies provide adequate coverage for EBCE students and participating resource persons and organizations.

EBCE programs should have coverage that can meet contingencies such as these:

1. A student could be involved in an accident while traveling to and from or while participating in field experiences.
2. Resource persons and organizations could be held liable for personal injury or property damage, as could school employees.
3. Resource persons, although covered by their employer's Workmen's Compensation insurance, could be injured while working with an EBCE student, for which injury the school could be held liable.
4. Resource persons using their personal vehicles to transport EBCE students may not be adequately insured against potential liability in case of an accident.

Most FWL/EBCE programs advise or require their students to enroll in the supplemental health coverage available at minimal cost to students.

Northwest Regional Educational Laboratory

NWREL/EBCE has identified the need for four basic kinds of insurance coverage:

1. General liability to cover employers and students at community learning sites. (Districts have used existing policies or have purchased additional insurance.)
2. Accident insurance to cover minor injuries to students and staff at the learning center. (Parents are generally asked to buy into the district plan that covers students in school-related activities.)
3. Transportation insurance to cover students and staff traveling in the community on program-related activities. (Existing district coverage is usually adequate.)
4. Personal injury protection to cover students at community learning sites. (Coverage in this area is usually provided through the student or parent's own insurance, district insurance for students participating in school-related activities or any statewide plans that may exist to protect students in school-related work situations.)

Research for Better Schools

The RBS model is offered as part of a school course or instructional program and is eligible for existing school district coverage for students participating in educational endeavors away from the school building. The majority of community sites participating in EBCE have existing insurance policies that cover most contingencies. Where coverage is inadequate, insurance companies have demonstrated a willingness to provide specific coverage.

Configuration of EBCE in Adopting Schools

Program planning includes an examination of the differing EBCE program structures and the extent to which EBCE student activities are compatible with existing class schedules.

Appalachia Educational Laboratory

The AEL model is designed to operate effectively in any of several configurations relative to the local school system. Although the curriculum is a total and complete system that can be installed intact, some school systems adopting the AEL model have made changes based on local needs. The program can be and currently is being operated from (a) special classrooms within the sponsoring school, (b) separate learning centers drawing from one or several schools, (c) special classrooms within one school but drawing from several schools and (d) facilities within a community college.

Existing high school courses can also be incorporated into the AEL program (e.g., although trigonometry is offered as one of the 28 AEL/EBCE courses, students can be given the option of learning this subject in a classroom situation rather than on an individualized basis), and portions of AEL/EBCE program materials can be inserted into existing programs (e.g., one site is using the Student Career Guide and portions of the Student Program Guide in a program for high school dropouts).

These and other variations can be effective, depending on such factors as transportation, density of community sites, administrative requirements, comparative costs and the relative advantages of having students remain part of or develop a separate "identity" from their peers within the high school.

Far West Laboratory

FWL/EBCE can be installed as an alternative school or as a program within a regular school. It requires only that students be able to arrange significant (two to four-hour) blocks of time for meeting with resources in the community.

Far West Laboratory is actively helping districts adopt/adapt and implement the model in a variety of configurations: as a part-time program for potential dropouts; as a full-time program for educationally handicapped students; to expand the academic learning potential in work experience programs; to enable classroom teachers to offer experience-based learning opportunities to students in their courses; to add structure to existing alternative learning programs and schools; to offer EBCE to community college students; to expand extracurricular "explorer club" offerings; and so forth. Variations in staffing, facilities, target populations and other variables have been indicated throughout this document.

Northwest Regional Educational Laboratory

NWREL/EBCE is easily adaptable to the individual requirements of adopting districts and can be tailored to fit a range of needs and available resources:

1. EBCE educational services can be offered as part of a district's regular program or as an alternative to the regular program.
2. The total program can be adopted, or only portions of it.
3. The program is applicable to a wide range of student needs, from the educationally or physically handicapped to the gifted.
4. The learning center or home base can be located within a school or in the community.
5. The program can be governed by a school board, with the assistance of an EBCE advisory group, or by its own board of directors as in the original model.

NWREL/EBCE materials and staff training are available to help adopters make these various adaptations.

While the daily schedules of NWREL/EBCE students are based primarily on their planned experiences in the community, students should also have access to regular high school classes whenever needed and be permitted to participate freely in the parent school's extracurricular activities.

Research for Better Schools

The RBS model is integrated with the regular school schedule. The model uses the strategy of working closely with school administration and department heads to develop staff support for the program. When students are in school, they follow the same rules and procedures all students follow.

The configuration of the model in adopting districts will reflect the needs and objectives of those individual adopters and will vary from site to site, depending on student needs in the adopting district, the willingness of the community to participate in the educational process and the availability of resources.

FOR ADDITIONAL INFORMATION

Anticipating the growing interest in EBCE, the National Institute of Education and the four laboratories that piloted the program have developed practical, step-by-step implementation manuals for all four models. The laboratories can also provide technical assistance and staff training to help develop EBCE in new settings and implement it in a variety of ways to serve a range of student needs.

"Brokers"--individuals who have been trained in all four programs--are available from the four laboratories to help individual districts or schools analyze each of the EBCE models for their local situation. Brokers are familiar with the materials, staff training and other technical assistance available from each model, and they work with adopters in designing EBCE programs that meet each district's unique requirements.

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